



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,876	03/22/2004	Gene Probasco	61842CIP(51035)	9875
21874	7590	12/22/2010	EXAMINER	
EDWARDS ANGELL PALMER & DODGE LLP			LEVY, NEIL S	
P.O. BOX 55874				
BOSTON, MA 02205			ART UNIT	PAPER NUMBER
			1615	
			MAIL DATE	DELIVERY MODE
			12/22/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/805,876	<b>Applicant(s)</b> PROBASCO ET AL.	
	<b>Examiner</b> NEIL LEVY	<b>Art Unit</b> 1615	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejections under 35 USC 112 in view of arguments and amendment to the specification are withdrawn.

### ***Claim Rejections - 35 USC § 103***

Claim 1-3, 5, 7-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JONES '96 in view of PARSONS 3886171 and LOCKE et al 5372817.

JONES recites fungicidal & acaricidal activity of both alpha & beta Hops acids was known (p. 165,1) & use of the natural hops acids provides fungicidal and acaricidal activities of both alpha and beta hops acids. Repellency is shown as an effective control means. Note the instant claims are also to control. JONES also shows dose/effect (page 169, line 5).

JONES at 2.1 shows control of spider mite with beta hop acids. Application was of 0.1, 1 or 10% B-acid (2.2.3). The application of the hop acids was effective to control pests, regardless of the carrier used-water and ethanol.

JONES shows beta hop acids are able to control spider mites of plants. JONES did not provide standard application field formulations- PARSONS does- to control acarids on plants (column 1, top) including spider mites (column 8, lines 37-41). Aqueous solutions and emulsifiable concentrates in hydrocarbons are shown with soaps, cationic, & nonionic surfactants (column 6, lines 44-67). Standard concentrations of actives are

shown to be 0.4-0.5% (col 5, top) applied to plants at 0.1-4kg/hectare (col 8, lines 23-41). Chemicals used were not GRAS or plant extracts.

LOCKE (column 2, line 48; column 3, line 5) applies safer pesticides to control fungus and insects (column 5, lines 24-26) on plants, applied as a liquid soap (column 4, bottom) with other safe insecticides and surfactants (column 5, lines 35-41) like the Tweens (column 6, lines 14-18) or tritons. NEEM fractions are used, & are effective acarid, insect, fungal & mildew controllers (col. 5, lines 21-27).

One of ordinary skill in the pesticide arts would find it obvious to use hop acids, stabilized as emulsions, as safer alternatives to the PARSONS and similar chemical pesticides. Motivation to use hops compositions is to provide safer alternatives and combine in one application, control of both acarid and fungal plant pests with the added components of LOCKE neem fractions, also safer pesticides, & effective to control fungus & mildews.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize pest control means, to use the Jones teaching, modified with additional active of LOCKE, to increase efficacy and range of pest species to be treated with one application. The formulation with soap & surfactants is an obvious modification shown by LOCKE & by PARSONS, in order to provide stability, dispersibility, compatibility of ingredients, &/or processing ease.

It is well established that a combination of ingredients having the same effect is obvious in re KERKHOVEN 626 F. 2d 846,850,205 USPQ 1069(CCPA 1908).

One in the art would expect all mites to be controlled and could test with reasonable expectation of success, in accord with KSR. Application as an aqueous emulsion is standard procedure for pest control in agriculture, & is shown by LOCKE, with soap, as a selection of a limited number of surfactants obvious to combine with expectation of success.

Applicant has not provided any objective evidence of criticality, nonobvious or unexpected results that the administration of the particular ingredients' or concentrations provides any greater or different level of prior art expectation as claimed, and the use of ingredient for the functionality for which they are known to be used is not basis for patentability.

### ***Response to Arguments***

Applicant's arguments filed 10/13/2010 have been fully considered but they are not persuasive.

Applicant argues no motivation to combine Jones with Locke, and emulsions are not JONES' ethanolic solutions. Further, JONES fails to kill mites.

We find the JONES reference provides essentially the same effective agents as applicant's. JONES provides the experimental results to suggest the use of safer

Art Unit: 1615

alternatives to chemical pesticide agents. One in the art, desiring safer , but effective approaches to treat crops to control mites, would find the JONES hops acids , combined with another safe agent, the LOCKE neem fractions, obvious to use in the manner normally used, as indicated by LOCKE & by PARSONS, with aqueous formulations of one or more emulsifiers and soap.

No claims are allowed

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL LEVY whose telephone number is 571-272-0619. The examiner can normally be reached on Tuesday-Friday, 7 AM to 5:30 PM EST..

Art Unit: 1615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT A. WAX can be reached on 571-272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NEIL LEVY/  
ART UNIT 1615

12/17/2010